

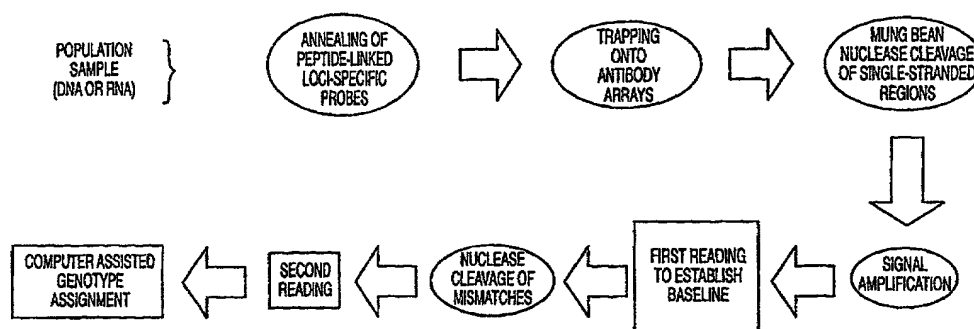


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(54) Title: METHODS FOR DETECTION OF NUCLEIC ACID POLYMORPHISMS USING PEPTIDE-LABELED OLIGONUCLEOTIDES AND ANTIBODY ARRAYS

BASIC WORKING PRINCIPLE OF VGMS-PL



(57) Abstract

The present invention is directed to methods and compositions for use in screening nucleic acid populations for nucleic acid polymorphisms. The methods, referred to generally as *ValiGeneSM Mutation Screening, Peptide-Linked (VGMS-PL)* methods, are specifically designed for high-throughput genotype mapping and gene expression analysis of animal and plant nucleic acids without requiring a PCR amplification step. In particular, the methods of the invention utilize oligonucleotide probes labeled with distinguishable and identifiable peptide tags, that are captured on addressable antibody arrays.

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